

In the Specification:

Please amend the following paragraphs of the specification as set forth below:

[0013] Fig 1 is a cross sectional view of the redundant signal transmission device. Two signal transmission tubes are shown joined by a plastic bead that bonds the two tubes together. Fig 2 shows a spool with the redundant signal transmission tubes wound on the spool with an initiation device for each signal transmission tubes securely mounted on the spool flange and two ~~initiators~~ detonators in protective sleeves affixed to the other end of the signal transmission tubes. Fig. 3 is a plan view of the apparatus for joining two tubes fed past a nozzle in a fixture that aligns the tubes for introduction of the adhesive bead between the adjacent tubes. Fig. 4 is an enlarged view showing the nozzle and nozzle opening for extruding the adhesive bead. ~~Fig. 5 is an elevational view of the apparatus of Figs. 3 and 4. Fig. 6 is a view looking downstream showing the nozzle and hot adhesive producing device.~~

[0025] A preferred embodiment of the present invention is to package the signal transmission system on a spool designed for rapid deployment of the product. Fig 2 illustrates such a packaging method. A plastic spool 20 is used to package the redundant signal transmission leads. For a self-contained field system, it is essential to provide a factory assembled product for field use. Fig 2 shows the redundant signal transmission leads with a M-81 firing device ~~30-31~~ affixed to one end of the shock tube leads 2a and 2b. A continuous length of the shock tube leads will be wound around the barrel of the spool 20. These lengths can vary from 20 feet to as much as 1,000 feet depending upon the application. A common length is 200 feet on a spool. On the opposite ends of the shock tube leads, a detonator 42 is typically crimped onto the end of the shock tube. For transport, a protective cap 40 will be used to cover the detonator until deployment is required. Retaining clips 22 securely affix the M-81 firing device to the spool flange. These clips and flange design allow the retention of the M-81 firing devices at rotational speeds of 1,500 RPM. This feature allows a soldier in the field to deploy the device from the back of a rapidly moving vehicle without dislodging the individual components. Another key feature is the use of a tapered exit hole 28 at the location on the flange where the leads exit

the barrel of the spool. This gradually tapered exit hole provides protection from sharp bends that could inadvertently damage the individual signal transmission leads.

[0027] In field use, the protective caps 40 are removed from the detonators 42. The detonators are then inserted into the explosive charge that will be detonated. A shaft is then inserted through the arbor hole in the spool and the spool is allowed to rotate, deploying the redundant signal transmission lead 10 while the operator retreats to a safer position. After deployment, the M-81 firing devices ~~30~~31 are removed from the spool flange. By pulling and releasing the pull rings 32, a spring-loaded firing pin inside the M-81 will impact the percussion primer contained in the in-line initiator 34. Upon firing, a signal is transmitted through the shock tube leads to initiate the detonator 42.